WHAT IS CLAIMED IS:

1. A system for creating aerial messages using a plurality of aircraft, the system comprising:

a logic and processing unit configured to provide a user interface for creating aerial messages using a plurality of aircraft, wherein the logic and processing unit is located in a master aircraft and sends data to and receives data from a master controller ;

a master controller located in the master aircraft, wherein the master controller is a node on a wireless local area network (LAN) and is configured to transmit data over the LAN to a plurality of slave controllers and to receive data from each of the plurality of slave controllers;

a plurality of slave controllers located in a plurality of slave aircraft, wherein each of the plurality of slave controllers is a node on the wireless LAN and is configured to receive data from and transmit data to the master controller ; and

a plurality of vapor puff creation systems located in the master aircraft and in each slave aircraft.

2. The system of Claim 1, wherein the master controller transmits data using a single frequency.

3. The system of Claim 1, wherein the master controller transmits data using unlicensed spread spectrum radio frequencies.

4. The system of Claim 3, wherein master controller transmits data using a frequency hopping spread spectrum system.

5. The system of Claim 3, wherein master controller transmits data using a direct sequence spread spectrum system.

6. The system of Claim 1, wherein each of the plurality of slave controllers is assigned a unique network address.

7. The system of Claim 6, wherein the unique network address of each slave controller is dynamically assigned by the logic and processing unit .

8. The system of Claim 1, wherein the plurality of aircraft fly in a frontline formation.

9. The system of Claim 1, wherein the plurality of aircraft fly in an echelon formation.

10. The system of Claim 1, wherein the plurality of aircraft fly in a V-shaped formation.

11. The system of Claim 1, wherein the plurality of aircraft fly in a wedge formation.

12. The system of Claim 1, wherein the plurality of aircraft fly in a vertically descending echelon formation.

13. The system of Claim 1, wherein the wireless LAN is an Ethernet network.

14. The system of Claim 1, wherein the logic and processing unit is further configured to determine when one of the plurality of slave aircraft travels out of a receiving range.

15. The system of Claim 14, wherein the logic and processing unit is further configured to notify a user of the computer when one of the plurality of slave aircraft travels out of the receiving range.

16. The system of Claim 1, wherein the aerial message is an alphanumeric message.

17. The system of Claim 1, wherein the aerial message is a graphical image.

18. The system of Claim 1, wherein the aerial message is a symbol.

19. A method for producing aerial messages, the method comprising:

transmitting puff data from a computer to a plurality of controllers located in a plurality of aircraft, the puff data including an indication of when each of the plurality of aircraft is to emit a vapor puff; and

receiving status data at the computer from each of the plurality of controllers, the status data indicating whether the vapor puff was emitted by each of the plurality of aircraft.

20. The method of Claim 19, wherein the computer is a laptop device.

21. The method of Claim 19, wherein the computer is a handheld device.

22. The method of Claim 19, wherein the puff data includes a time delay indicating how long to wait before emitting the vapor puff.

23. The method of Claim 19, wherein the puff data includes a duration measurement indicating how wide to make the vapor puff.

24. The method of Claim 19, wherein the vapor puff is a visible fog.

25. The method of Claim 24, wherein the vapor puff is colored.

26. The method of Claim 19, wherein the status data includes an indication of the vapor level remaining in a vapor tank located in each of the plurality of aircraft.

27. A method for producing aerial messages using a plurality of aircraft flying in formation, the method comprising:

analyzing an aerial message to determine which of a plurality of aircraft should produce a vapor puff in order to form a portion of the aerial message; and

transmitting data packets addressed to a controller located in each of the plurality of aircraft instructing when the aircraft should emit vapor puffs, wherein each of the data packets is transmitted over a wireless LAN to the controller .

28. The method of Claim 27, further comprising:

based on a flying formation, determining whether a time delay is to be associated with the vapor puff; and

determining a time duration to be associated with the vapor puff.

29. A system for producing aerial messages using a plurality of aircraft, the system comprising:

a main computer configured to provide a user interface for use in producing aerial messages using a plurality of aircraft, wherein the main computer operates as a node on a wireless network to transmit data to and receive data from a plurality of controllers located in a plurality of aircraft;

a plurality of controllers located in a plurality of aircraft, wherein each of the plurality of controllers is a node on the wireless network and wherein each of the plurality of controllers is configured to process data received from the main computer; and

a plurality of vapor puff creation systems located each of the plurality of aircraft.

30. The system of Claim 29, wherein the main computer is located in one of the plurality of aircraft.

31. The system of Claim 29, wherein the main computer is located at a ground control station.

32. A control box for controlling the emission of vapor material from an aircraft, the control box comprising:

a transceiver for transmitting data to and receiving data from one or more nodes on a wireless network, the received data including an indication of when an aircraft is to produce a vapor emission;

an antenna connected to the transceiver for use in transmitting and receiving the data from the one or more nodes on the wireless network;

a processor for processing the data received by the transceiver, the processor including firmware for determining from the received data when the aircraft is to produce the vapor emission;

a first relay capable of activating a vapor pump in response to a signal from the processor; and

a second relay for opening a solenoid valve in response to a signal from the processor.

33. The control box of Claim 32, wherein the processor is directly connected to the transceiver.

34. The control box of Claim 32, further comprising a hub connected to the transceiver and the processor, wherein the hub provides a connection between the transceiver and the processor.

35. The control box of Claim 32, wherein the hub further connects to a main computer, the main computer providing a user interface for the control box.

36. The control box of Claim 32, wherein the transceiver transmits data using unlicensed spread spectrum radio frequencies.

37. The control box of Claim 32, wherein the transceiver transmits data using radio frequencies in the 2.4 – 2.48 GHz range.

38. The control box of Claim 32, further comprising one or more light emitting diodes (LEDs), the one or more LEDs being activated by the processor in response to various events.

39. The control box of Claim 38, wherein one of the LEDs is activated when the transceiver is receiving data from the one or more nodes on the wireless network.

40. The control box of Claim 38, wherein one of the LEDs is activated when the pump is turned on.

41. The control box of Claim 38, wherein one of the LEDs is activated when the solenoid valve is open.

42. A system for creating aerial messages, the system comprising:

a graphical user interface configured to display one or more screens, wherein a user employs the displayed screens to create an aerial message;

a calculation module configured to calculate a number of vapor puffs required by one or more aircraft in creating the aerial message;

a database configured to store the aerial message;

a data packet generation module configured to generate data packets including portions of the aerial message; and

a simulation module configured to graphically simulate the creation of the aerial message.

43. The system of Claim 42, wherein the data packet generation module is further configured to transmit the data packets to one or more aircraft over a wireless network.

44. The system of Claim 42, wherein the simulation module is further configured to simulate the creation of the aerial message in real time as the one or more aircraft physically create the aerial message.

45. The system of Claim 42, wherein the database is further configured to store information about a plurality of aircraft used to create the aerial message.

46. A data format, stored in a computer readable medium, comprising:

an internet protocol (IP) address portion including an address associated with a particular aircraft on a wireless network;

a puff data portion including an indication of whether the particular aircraft is to produce a vapor puff;

a duration measurement portion including a measurement for how wide to make the vapor puff; and

a time delay measurement portion including a measurement for how long to wait before creating the vapor puff.

47. A data format, stored in a computer readable medium, comprising:

an internet protocol (IP) address portion including an address associated with a particular node on a wireless network;

a vapor level data indicator portion including an indicator that data pertaining to a measurement of vapor material remaining in a tank of a particular aircraft is being sent in a data packet; and

a vapor level data portion including the measurement of how much vapor material remains in the tank of the particular aircraft.

48. A method for simulating the creation of an aerial message, the method comprising:

providing a plurality of physical aircraft;

providing a plurality of graphical images representative of the physical aircraft; and

correlating each of the plurality of graphical images to one of the plurality of physical aircraft, wherein each of the plurality of graphical images display a vapor puff graphic at the same time as its corresponding physical aircraft emits a vapor puff.

49. A method of composing an aerial message, the method comprising:

displaying a first screen containing one or more characters of an aerial message, wherein a user selects one or more characters to compose the aerial message;

in response to the user specifying an option to save the composed aerial message, creating an aerial message file, wherein the aerial message file includes a binary representation of the composed aerial message.

50. The method of Claim 49, wherein the aerial message file further includes a breakdown of the composed aerial message into vapor puffs to be produced by each of a plurality of aircraft.

51. The method of Claim 49, wherein the one or more characters include letters from the English language.

52. The method of Claim 49, wherein the one or more characters include portions of a graphical image.

53. A method of creating an aerial message file using a plurality of aircraft, the method comprising:

receiving an aerial message from a user, wherein the received aerial message includes one or more potions and wherein the received aerial message is used to create an aerial message file;

opening an output file;

for each portion of the aerial message, scanning one or more data files for data corresponding to the portion, wherein the corresponding data is copied to the open output file;

for each aircraft, calculating a number of vapor puffs required by the aircraft to produce the aerial message, wherein the number of vapor puffs required is copied to the open output file; and

closing the output file, wherein the output file is the aerial message file.

54. A method for repositioning aircraft in a formation of multiple aircraft, the method comprising:

providing a network address to each of a plurality of aircraft, wherein the network address uniquely identifies each of the plurality of aircraft on a network;

providing an identifier specifying a position of each of the plurality of aircraft in a flight formation;

in response to a user selecting an option from a main computer to switch the positions of two or more of the plurality of aircraft, redirecting data packets to the two or more of the plurality of aircraft based on a new position of the two or more aircraft in the flight formation, wherein the data packets are redirected

without requiring pilots of the two or more of the plurality of aircraft to alter any settings in the two or more of the plurality of aircraft.

55. A method of forming characters for an aerial message, the method comprising:

providing an option for a user to specify a pattern of vapor puffs, wherein the specified pattern of vapor puffs forms a desired character;

receiving the pattern of vapor puffs specified by the user; and

translating the received pattern of vapor puffs to a binary representation of the desired character.

56. The method of Claim 55, further comprising:

saving the binary representation of the desired character in a first computer file;

adding the binary representation of the desired character to a second computer file, wherein the second computer file includes binary representations for one or more characters; and

creating a graphic file of the desired character.

57. The method of Claim 55, wherein providing an option for a user to specify a pattern of vapor puffs includes displaying a grid of checkboxes, the user selecting a checkbox from the grid of checkboxes to represent a desired vapor puff.

58. The method of Claim 55, wherein the desired character is a graphical image.

59. The method of Claim 55, wherein the desired character is a symbol from a language.

60. The method of Claim 57, wherein the user selects checkboxes using a computer touch screen.

61. The method of Claim 57, wherein the user selects checkboxes using a pointing device.

62. The method of Claim 57, wherein the user selects checkboxes using a mouse device.

63. The method of Claim 57, wherein the user selects checkboxes using voice commands.

64. The method of Claim 57, further comprising in response to the user selecting checkboxes from the grid of checkboxes, displaying a graphical representation of a vapor puff corresponding to the selected checkboxes.

65. The method of Claim 55, further comprising displaying the pattern of vapor puffs as a graphical representation while the user is specifying the pattern of vapor puffs, whereby the user sees the character being formed by the specified pattern of vapor puffs.

66. The method of Claim 65, wherein the displayed graphical representation is presented as seen by a viewer on the ground.

67. The method of Claim 65, wherein the displayed graphical representation is presented as an aerial view.

68. A method for displaying images on a vapor screen, the method comprising:

determining a predefined area for an aerial vapor screen;

using software for controlling vapor emissions from a plurality of aircraft, creating an aerial vapor screen; and

projecting images onto the aerial vapor screen.

69. The method of Claim 68, wherein the images are projected from an aircraft located below the aerial vapor screen.

70. The method of Claim 68, wherein the images are projected from a helicopter located below the aerial vapor screen.

71. A system for composing and displaying aerial messages, the system comprising:

a first software module configured to permit a user of the software to compose an aerial message; and

a second software module configured to coordinate the display of the aerial message.

72. A method for producing aerial messages, the method comprising:

transmitting data from a first processing unit to a plurality of controllers located in a plurality of aircraft, wherein the plurality of controllers each include a second processing unit; and

receiving data at the first processing unit from each of the plurality of controllers, the received data being responsive to the data transmitted by the first processing unit.